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Review of *The Science, Impacts and Monitoring of Drought in Western Canada: Proceedings of the 2004 Prairie Drought Workshop* Edited by Dave Sauchyn, Madhav Khandekar, and E. Ray Garnett

Virginia Wittrock

Environment and Forestry, Saskatchewan Research Council, Saskatoon

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Rather than fear-mongering, Ashworth concludes on a hopeful note. His closing chapter provides an encouraging look at a range management experiment on the Knife Chief Bison Range, where the Pine Ridge Indian Reservation, through a course offered at the Oglala Lakota College, has curtailed intensive grazing practices by cattle ranchers, torn down fences, and introduced a free-ranging bison herd. Remarkably, within a short time, springs, seeps, and lush prairie grasses appeared in places where they had been absent for decades. Acknowledging that such a conversion is not in the cards for all ranchers, and that it would make little difference in places where overdraft has already occurred, Ashworth nonetheless uses the example to make his point: there is no one-size-fits-all solution, but there *are* solutions. But only if people take notice, plan for the future, and engage in coordinated action. **Sandra Zellmer**, *College of Law, University of Nebraska-Lincoln*.

The Science, Impacts and Monitoring of Drought in Western Canada: Proceedings of the 2004 Prairie Drought Workshop. Edited by Dave Sauchyn, Madhav Khandekar, and E. Ray Garnett. Regina, SK: Canadian Plains Research Center, University of Regina, 2005. viii + 101 pp. Maps, color plates, figures, tables, references, index. \$15.00 paper.

Drought is not an unusual phenomenon on the Canadian prairies or the U.S. Great Plains. There were many short-term droughts in the prairies during the 20th century that generally lasted one to two years (e.g., 1961, 1988). The Canadian prairies multi-year drought event (1999-2003+) has been considered similar in severity to the 1930s drought years.

The 2004 Prairie Drought Workshop resulted in 76 scientists and resource managers gathering in Calgary, Alberta, to share information on drought science, impacts, and monitoring. Presenters examined the impacts on agriculture, stream flow, forests, and ground water, including potential impacts under a changed climate. Though focused on the Canadian prairies, the information presented could be applied to many parts of the U.S. Great Plains.

Bonsal and Stewart's examination of the 2001 and 2002 atmospheric circulation patterns argues that the droughts of 2001 and 2002 were unusual compared to those in the 20th century. Bonsal's research indicates that their atmospheric causes appeared to be related to a northward extension of circulation anomalies from the

U.S. into Canada. This is different from previous severe droughts which could be related to large-scale teleconnections such as El Nino/Southern Oscillation (ENSO). Stewart suggests that the atmospheric circulation processes occurring during the cold season were critical for the 2001 and 2002 droughts.

While the droughts of 2001 and 2002 were extremely severe, they were not anomalous compared to the long-term trends over the last 250 years. Sauchyn's tree ring reconstructions indicate that the 20th century was anomalous because of its lack of sustained drought. The possibility of more severe droughts makes proactive risk management necessary.

Two papers provide material on risk management strategies undertaken by federal and provincial governments, including attempts to get information to the public on climate and hydrologic conditions, thereby helping agricultural producers to make better management decisions. Another paper urges scientists and resource managers to take a proactive drought management approach. Wilhite suggests that policies encouraging self-reliance and sustainable use of natural resources are more effective in the long term, that there is a need to identify and quantify sectors and people most at risk, and that policies, plans, and mitigation programs formulated to address vulnerabilities must be implemented in a systematic manner.

Are atmospheric flow patterns indeed changing? And if so, to what degree and to what effect? If the 20th century was anomalously moist, are governments and individuals ready or able to deal with more severe drought events in the 21st? The proceedings are well worth reading not only for the information they provide but for the significant questions they raise. **Virginia Wittrock**, *Environment and Forestry, Saskatchewan Research Council, Saskatoon*.

Prairie Time: A Blackland Portrait. By Matt White. College Station: Texas A&M University Press, 2006. x + 251 pp. Map, illustrations. \$19.95 cloth.

Nowadays, the Blackland Prairies of north Texas are the kind of landscape most people think of as great for subdivisions and strip malls: generally flat, easily bulldozed, and not too far from Dallas-Fort Worth. *Prairie Time: A Blackland Portrait* traces a similar utilitarian vision of the prairie in 19th-century pioneer descriptions as well: good for plowing, grazing, and—once the buffalo and Native Americans are exterminated—not too far from outposts of commerce. The book serves as an